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Notice of Allowability	Application No.	Applicant(s)	
	10/634,783	MATSUDA ET AL.	
	Examiner	Art Unit	
	Susan S. Lee	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 1/27/05.
2. ☒ The allowed claim(s) is/are 1-92.
3. ☒ The drawings filed on 27 January 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
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| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>1/10/05</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input checked="" type="checkbox"/> Other <u>See Continuation Sheet</u>. |
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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

As to claim 50, line 7, after "torque", insert a comma - - , - - .

As to claim 54, lines 1-2, before "plurality of AC components", change "the" to - - a - - because there is no previous recitation of a plurality of AC components.

As to claim 55, line 7, after "torque", insert a comma - - , - - .

As to claim 68, lines 7-8, change "sensing means" to - - sensor - - because there is a previous recited sensor in line 4 of the same claim. The reason is in applicant's remarks, page 39, last paragraph, that states "new claims 56-92 that correspond to claims 13-49, respectively except that the new claims 56-92 do not recite any element with 'means plus function' language".

The following is an examiner's statement of reasons for allowance:

The primary reason for allowance of claims 1-12 is the inclusion of the method steps of controlling a drive of an endless belt by detecting an angular displacement or an angular velocity of a driven rotary member of the belt not contributing to transfer of the drive torque; separating an AC component of the displacement or the velocity

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having frequency that corresponds to a periodic thickness variation of the belt; and controlling the rotation of a drive rotary member according to an amplitude and a phase of the AC component. This is found in all of claims 1-12, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claims 13-24, 56-67, and 89 is the inclusion of a control drive device of an endless belt having a control means or controller for detecting an angular displacement or an angular velocity of a driven rotary member of the belt not contributing to transfer of the drive torque; for separating an AC component of the displacement or the velocity having frequency that corresponds to a periodic thickness variation of the belt; and for controlling the rotation of a drive rotary member according to an amplitude and a phase of the AC component. This is found in all of claims 13-24, 56-67, and 89, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claims 25-33 and 68-76 is the inclusion of a control drive device of an endless belt having a sensing means or a sensor for detecting an angular displacement or an angular velocity of a driven rotary member of the belt not contributing to transfer of the drive torque; a control means or a controller for separating an AC component of the displacement or the velocity having frequency that corresponds to a periodic thickness variation of the belt; and the control means or the controller controls the rotation of a drive rotary member according to an amplitude and a phase of the AC component. This is found in all of claims 25-33 and 68-76, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claims 34-49, 77-88, and 90-92 is the inclusion of a control drive device of an endless belt having a control device for detecting an angular displacement or an angular velocity of a driven rotary member of the belt not contributing to transfer of the drive torque; for separating an AC component of the displacement or the velocity having frequency that corresponds to a periodic thickness variation of the belt; and a control means or a controller for controlling the rotation of a drive rotary member according to an amplitude and a phase of the AC component. This is found in all of claims 34-49, 77-88, and 90-92, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claims 50-54 is the inclusion of a program for controlling drive of an endless belt by separating an AC component of an angular displacement or an angular velocity of a driven rotary member of the belt not contributing to transfer of the drive torque. The AC component have a frequency that corresponds to a periodic thickness variation of the belt. The program also controls the rotation of a drive rotary member according to an amplitude and a phase of the AC component. This is found in all of claims 50-54, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 55 is the inclusion of a recording medium storing a program for controlling drive of an endless belt by controlling rotation of a drive rotary support member of the belt. The program allows a computer to execute separating an AC component of an angular displacement or an angular velocity of a driven rotary member of the belt not contributing to transfer of the drive torque. The AC

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component have a frequency that corresponds to a periodic thickness variation of the belt. The program also controls the rotation of a drive rotary member according to an amplitude and a phase of the AC component. This is found in all of claim 55, but not disclosed nor suggested by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan S. Lee whose telephone number is 571-272-2137. The examiner can normally be reached on Mon. - Fri., 10:30-8:00, Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Art Grimley can be reached on 571-272-2136 or 571-272-2800 (Ext. 52). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Susan S. Lee
Primary Examiner
Art Unit 2852

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